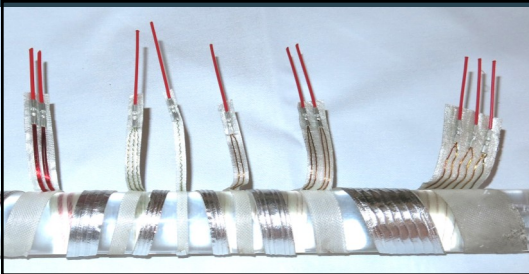
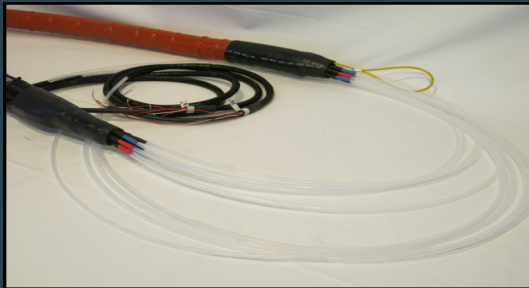




## STACK & EMISSIONS TESTING HEATED SAMPLE LINES



CLAYBORN MULTI-CIRCUIT HEAT TAPE



MULTIPLE TUBE CEMS LINES



HEATED JUMPER LINES



TEMPERATURE CONTROLLERS

CLAYBORN LAB IS A HEAT TAPE MANUFACTURER AND CUSTOM BUILDER OF HEAT-TRACED PRODUCTS.

- 100' SAMPLE LINES ABLE TO MAINTAIN 400°F AT AMBIENT TEMPS OF 0°F WHILE ONLY USING 20 AMPS ON 120 VAC
- DURABLE, LIGHTWEIGHT, TEAR RESISTANT TUFF GUARD OUTER COVER
- STANDARD PTFE OR PFA TEFLON TUBING
- MULTI CIRCUIT HEAT TRACING
- ARMORED END SYSTEM PROVIDES OPTIMAL TUBE PROTECTION AND FIELD REPLACEABLE TUBE END STUBS
- VOLTAGE OPTIONS FROM 12 VDC TO 277 VAC
- PRECISION SOLID STATE TEMPERATURE CONTROLLERS WITH CURRENT RATINGS FROM 15 TO 30 AMPS
- MULTI POINT STRAIN RELIEF (AIRCRAFT CABLE CONNECTED TO INTERNAL NYLON BRAID) FUNCTIONS AS A KELLUM GRIP AND ALLOWS FOR EASY HOISTING AND LOWERING OF THE LINE AS WELL AS SECURING DURING SAMPLING OPERATIONS
- CUSTOMIZABLE DESIGN WITH ADDITIONAL OPTIONS INCLUDING SELF-REGULATION, MULTIPLE TUBES, BUSS WIRES, OVERTEMP PROTECTION, INSERTS, WITH LENGTHS FROM 1' TO 200'+



HEATED SAMPLE LINE WITH ARMORED END SYSTEM

CLAYBORN LAB  
40173 TRUCKEE-TAHOE AIRPORT RD  
TRUCKEE, CA 96161  
P: 530-587-4700  
F: 530-587-5255  
www.claybornlab.com

BOB HORVATH.....BOBH@CLAYBORNLAB.COM.....PRESIDENT & OWNER  
STEVE LABRIE.....STEVEL@CLAYBORNLAB.COM.....GENERAL MANAGER  
NICK O'NEILL.....NICKO@CLAYBORNLAB.COM.....SALES ENGINEER  
REV JAN 2014

# TEMPERATURE CONTROLLED SAMPLE LINES

TURBINE & DIESEL ENGINE EMISSIONS, FTIR, STACK GAS SAMPLING, NATURAL GAS SAMPLING, PROCESS ANALYZERS, PORTABLE AND PERMANENT APPLICATIONS

- **CLAYBORN LABS NEW OUTER SHEATHING**

TUFF-GUARD IS THE STRONGEST, TEAR RESISTANT HEATED SAMPLE LINE COVER ON THE MARKET TODAY. MANUFACTURED FROM A HIGH-TECH POLYAMIDE-6 MATERIAL THAT IS RATED FROM -40 C TO +150 C. THIS GERMAN-MADE PRODUCT IS CHEMICAL & UV RESISTANT, EXTREMELY DURABLE, FLEXIBLE, CRUSH RESISTANT AND PROTECTS TEFLON TUBING FROM KINKING. THIS PRODUCT IS USED EXTENSIVELY IN HIGH SPEED TRAINS AND ROBOTICS AND IS CAPABLE OF MILLIONS OF BENDS AND FLEXES WITHOUT BREAKING OR CRACKING.

- **TUBING**

STAINLESS STEEL, TEFLON, PTFE, PFA, FEP, NYLON, EPDM, RUBBER, PVC, FIELD-REPLACEABLE NYLON, STAINLESS STEEL & TEFLON INSERTS  
HEAT TRACING FROM 1/8" - 4" OD

- **ARMORED ENDS**

SPECIALIZED END CAP SYSTEM PROTECTS INTERNAL TEFLON TUBING AND ALLOWS EASY FIELD REPLACEABILITY OF DAMAGED CONNECTION POINTS.

- **MULTI CIRCUIT HEAT TAPE**

CLAYBORN HEAT TAPE CAN INCORPORATE MULTIPLE CIRCUITS WHICH ALLOW 100' SAMPLE LINES TO ACHIEVE 400 F OPERATING TEMPERATURES AT 0 F AMBIENT WITH ONLY A 20 AMP CURRENT DRAW (ON 120 VAC) BY UTILIZING BOOSTER CIRCUITS. MULTIPLE CIRCUIT HEAT TAPE ALSO ALLOWS FOR MULTIPLE VOLTAGE INPUTS (120 / 240 VAC) ON THE SAME HEATED SAMPLE LINE .

- **FLEXIBILITY & WEIGHT**

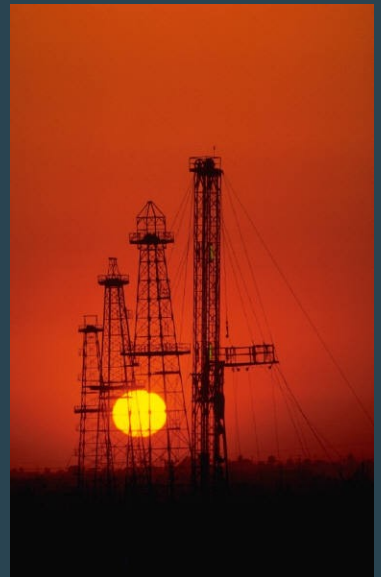
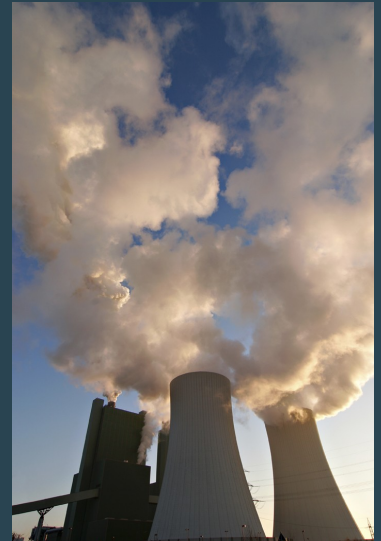
RUGGED CONSTRUCTION IS HIGHLY FLEXIBLE & LIGHTWEIGHT WITH STANDARD 100' FTIR TEFLON SAMPLE LINE WEIGHING ONLY 44 POUNDS.

- **TEMPERATURE CONTROL UP TO 400 F**

SELF-REGULATED CONTROL BY EMBEDDED THERMOSTAT, OR CONTROLLED USING THERMOCOUPLE AND/OR RTD WITH AN EXTERNAL TEMPERATURE CONTROLLER

- **OPTIONS**

TEMPERATURE INDICATOR LIGHTS, OVERTEMP PROTECTION CIRCUIT, ELECTRICAL / MESSENGER BUSS, MULTIPLE TUBES, HEATED OR UNHEATED, MAY BE BUNDLED TOGETHER



CLIENTS UTILIZING CLAYBORN PRODUCTS INCLUDE ANADARKO, AIR HYGIENE, METCO, OASIS ENVIRONMENTAL, GRACE CONSULTING, GENERAL MOTORS, NORTHROP GRUMMAN, CATERPILLAR, THERMO FISHER SCIENTIFIC, SGS, ECOM, TESTO, VIG, M&C TECH GROUP, OHIO LUMEX, BALLARD POWER SYSTEMS, CLEAN AIR, MECHANICAL EQUIPMENT, GOLDEN SPECIALTIES, DOE, US MILITARY, & HUNDREDS OF OTHER COMPANIES WHO BENEFIT FROM CLAYBORN'S 40+ YEARS OF EXPERIENCE IN THERMAL APPLICATIONS.



PROUDLY OWNED & OPERATED BY  
MAUREEN & BOB HORVATH SINCE 1989



Clayborn Lab